

Patent Abstracts of Japan

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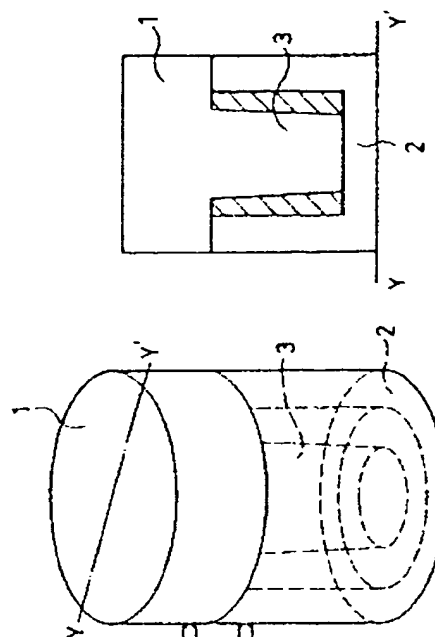
APPLICATION DATE : 10-11-89
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TITLE : PRODUCTION OF ITO TARGET
HAVING CYLINDRICAL SHAPE



ABSTRACT : PURPOSE: To produce the cylindrical ITO target having excellent utilization efficiency at a good raw material yield by press forming a powder mixture composed of In_2O_3 and SnO_2 to a cylindrical shape and calcining the molding as the target to be used at the time of forming the thin film of the ITO as an In-Sn oxide by sputtering.

CONSTITUTION: A slurry prepd. by mixing a small volume of water, binder and dispersant to the powder mixture composed of the In_2O_3 powder and the SnO_2 powder is injected under pressurization to the space part placed between an external container part 2 and a core part 3 of a cylindrical casting mold which is made of gypsum or resin and is constituted of a top cap 1 having a core part 3 and the external container part 2 in the production stage of the ITO target to be used at the time of forming the thin film of the ITO consisting of the oxide of the transparent In-Sn having an excellent electrical conductivity by sputtering. The resulted hollow cylindrical molding is heated to, for example, 1300 to 1450°C and is calcined, by which the ITO target is produced at the good material yield.

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